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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,879	03/30/2001	Jerry L. Kermicle	WIS4987P0081US	6744

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WOOD, PHILLIPS, KATZ, CLARK & MORTIMER
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EXAMINER

MOONAN, FRANCIS P

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 07/03/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,879

Applicant(s)

KERMICLE ET AL.

Examiner

Francis P Moonan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-68 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

In Paper No. 7 filed on 4 June 2002, applicant requested amendment of Claim 9. The request is acknowledged, and the amendment has been entered.

Claims 1-68 are restricted in the Office Action that follows.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Group I. Claims 1-5, 9-17, 21-34, 39-50, and 59-68, drawn to a **nontransgenic diploid female sexually hybridizable recipient** maize diploid plant comprising a **cross-incompatibility trait**, and methods of making said nontransgenic plants, classified for example in class 435, subclass 412.
- Group II. Claims 1-5, 8-17, 20-27, 31-35, 38, 39-50, and 59-68, drawn to a **transgenic diploid female sexually hybridizable recipient** maize diploid plant comprising a **cross-incompatibility trait**, and methods of making said transgenic plant, classified for example in class 800, subclass 293.
- Group III. Claims 1-5, 7, 9-17, 19, 21-27, 37, 39-50, and 59-68, drawn to a **nontransgenic diploid facultative or obligate apomictic recipient** maize diploid plant comprising a **cross-incompatibility trait**, and methods of making said nontransgenic plants, classified for example in class 800, subclass 271.
- Group IV. Claims 1-5, 7-17, 19-27, 33-34, 37-38, 39-50, and 59-68, drawn to a **transgenic diploid facultative or obligate apomictic recipient** maize diploid plant comprising a **cross-incompatibility trait**, and methods of making said transgenic plant, classified for example in class 800, subclass 266.
- Group V. Claims 1, 6, 9-14, 27, 36, and 67-68, drawn to a **nontransgenic recipient haploid** maize plant, comprising **comprising cross-incompatibility alleles**, and methods of making said transgenic plant, classified for example in class 800, subclass 299.
- Group VI. Claims 1, 6, 8-18, 20, 27, 36, 38, and 67-68, drawn to an **transgenic recipient haploid** maize plant, comprising **comprising cross-incompatibility alleles**, and methods of making said transgenic plant, classified for example in class 800, subclass 287.
- Group VII. Claims 1, 6-7, 9-18, 19, and 67-68, drawn to a **nontransgenic recipient haploid** maize plant, **comprising cross-incompatibility and apomixis alleles**, and methods of making said transgenic plant, classified for example in class 800, subclass 268.

Group VIII. Claims 1, 6-7, 9-18, 19-20, and 67-68 drawn to a **transgenic recipient haploid** maize plant, **comprising cross-incompatibility and apomixis alleles**, and methods of making said transgenic plant, classified for example in class 800, subclass 290.

Group IX. Claims 51-58 and 67-68, drawn to a **nontransgenic diploid sexually fertile pollen donor** maize plant comprising **Teosinte Crossing Barrier (TCB) alleles**, and methods of making said nontransgenic donor plants, classified for example in class 800, subclass 267.

Group X. Claims 51-58 and 67-68, drawn to a **transgenic diploid sexually fertile pollen donor** maize plant comprising **Teosinte Crossing Barrier (TCB) alleles**, and methods of making said transgenic donor plants, classified for example in class 800, subclass 278.

Claims appearing in more than one Group will be examined to the extent that they read on an elected invention.

The inventions are distinct, each from the other because:

The inventions of Groups I-X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, each of the inventions of Groups I-X are structurally distinct products, or distinct methods with distinctly different essential starting materials and essential method steps, and comprise distinct plant materials or methods with different modes of operation, and different functions.

The product inventions of Groups II, IV, VI, VIII, or X comprise maize plant plants transformed with a multitude of transgenes conferring a multitude of phenotypes and modifier genes, each not required by the inventions of Groups I, III, V, VII, or IX. The method inventions of Groups II, IV, VI, VIII, and X have essential transformation steps, comprising essential transgene starting materials, that are not required of the other groups.

The product and method inventions of Groups III-IV and VII-VIII comprise plant materials, or starting plant materials for essential method steps, which are chemically, structurally and genetically distinct; for example in that said plant materials comprise alleles and traits of apomixis that are not required of Groups I-II, V-VI, and IX-X.

The product and method inventions of Groups V-VII comprise haploid plant materials, or starting haploid plant materials for essential method steps, which are chemically, structurally

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and genetically distinct, for example in that they comprise haploid plants with distinctly different morphology, physiology, and mode of genetic operation, which results from haploid gene expression, including for example pollen infertility, that are not required of Groups I-IV and VIII-X.

The product and method inventions of Groups IX and X comprise donor plant materials, or starting plant materials for essential method steps, wherein said plants comprise distinctly different genetic modes or operation and perform different functions, than the inventions of Groups I-VIII. The product inventions of Groups IX and X have different functions and modes of operation as pollen donors for cross-incompatible maize plants, that are not required of the cross-incompatible recipient plants of the inventions of Groups I-VIII. Furthermore, the methods of Groups V-X comprise starting plant materials that are chemically, morphologically and genetically distinct, and the starting materials of the methods of Groups V-X do not require expression of a cross-incompatibility trait, that is required of the inventions of Groups I-IV.

Furthermore, the inventions of Groups I-X may be classified in distinctly different classes, and a search of all inventions would place an undue burden on the examiner.

Because these inventions are independent and distinct for the reasons stated above and have acquired a separate status in the art as shown by their different classification, the search for one group is not required of the others, and a search of all of the Groups would place an undue burden of search on the examiner, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francis Moonan, whose telephone number is (703) 605-1201. The examiner can normally be reached on Monday through Friday 9:00 AM to 5:00 PM (E.S.T.)

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218. The fax phone number for this Group is (703) 308-4315. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Francis Moonan, Ph. D.
27 June 2002

DAVID T. FOX
PRIMARY EXAMINER
GROUP ~~480~~ 1638

A handwritten signature in black ink, appearing to read "David T. Fox", written over the printed name and title.